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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 10/045,923 | 01/09/2002 | Wayne A. Downer | BEA920000021US1 | 3080 |

25253 7590 06/04/2004

IBM CORPORATION
IP LAW DEPT, ED02-905
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BEAVERTON, OR 97006-6063

EXAMINER

BATAILLE, PIERRE MICHE

| ART UNIT | PAPER NUMBER |
|----------|--------------|
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2186

DATE MAILED: 06/04/2004

5

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/045,923

Applicant(s)

DOWNER ET AL.

Examiner

Pierre-Michel Bataille

Art Unit

2186

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 06 June 2002.
2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-15 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5) ☒ Claim(s) 4-15 is/are allowed.
6) ☒ Claim(s) 1-3 is/are rejected.
7) ☐ Claim(s) _____ is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 2.
4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

Art Unit: 2186

DETAILED ACTION

1. This Official action is taken with respect to examination of the instant application, which presented claims 1-15 for examination, of which claim 1 has been re-written in preliminary amendment submitted June 6, 2002.

Specification

2. The specification has not been checked to the extent necessary to determine the presence of all possible minor errors.

Applicant is reminded to update the specification to reflect the status of all related application not in the specification whether abandoned or patented. As such all Attorney Docket Number should be replaced with respective application number and the status updated.

Please note that this is simply exemplary. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States

only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 1-3 are rejected under 35 U.S.C. 102(e) as being anticipated by (U.S. Patent No. 6,088,769).

With respect to claim 1, Luick discloses a multi processing system comprising first, second and other processing nodes, each including at least one processor (**a multiprocessor system having a plurality of nodes [nodes 101 including processor 103; Fig. 1]**); a communication pathway connecting said nodes and including a central hardware device (**nodes 101 coupled by an interconnecting communications pathway**); a shared, distributed memory, a portion of said shared memory being coupled to said processors and to said communication pathway, wherein said central hardware device communicates requests from said first node to said second node but not to said other nodes **[(transfer of data from one node to another (column 2, lines 46-54) and directing said data to the requesting node without going through the said interconnecting communications pathway node (column 2, lines 58-59)]**.

With respect to claim 2, Luick discloses that each node includes memory **[local caches 115, 117, and local memory 105 (see Fig. 1)]** directly accessible locally **(steps 301 through 309; Fig. 3)]**, and memory accessible remotely by others of the nodes **[steps 313 through 321; Fig. 3]**.

With respect to claim 3, Luick discloses the central hardware device storing information determining which nodes are storing copies of one or more data elements in each said local memory ***[global coherence table indicating copy of data and where it is reside (column 2, lines 50-54)]***.

5. Claims 1-3 are rejected under 35 U.S.C. 102(e) as being anticipated by U.S. Patent No. 6,088,770 (Tarui et al).

With respect to claim 1, Tarui discloses a multi processing system comprising first, second and other processing nodes, each including at least one processor (***shared multiprocessor (SMP)***); a communication pathway connecting said nodes and including a central hardware device (***crossbar network 900 with partition memory configuration information having bitmap or partition register***); a shared, distributed memory, a portion of said shared memory being coupled to said processors and to said communication pathway (***local cache and main memory including shared area accessible from all the nodes***) [Col. 4, Lines 43-54], wherein said central hardware device communicates requests from said first node to said second node but not to said other nodes ***[command and access to shared area is multicast to only the nodes sharing a corresponding partition but not to the other nodes [abstract; Col. 9, Lines 15-22; Col. 4, Lines 18-28; Lines 55-64]***.

With respect to claim 2, Tarui discloses that each node includes memory directly accessible locally accessible remotely by others of the nodes ***[Col. 4, Lines 55-64]***.

With respect to claim 3, Tarui discloses the central hardware device storing information determining which nodes are storing copies of one or more data elements in each said local memory **[Col. 6, Lines 66 to Col. 7, Line 6]**.

Allowable Subject Matter

6. Claims 4-15 are allowed.

Conclusion

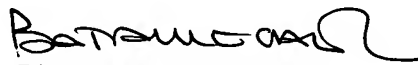
7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

US 6,564,252 (Hickman et al) teaching assigning each client in a network system with a plurality of clusters a unique partition within one of the clusters such that each data element is stored in the partition assigned to the client.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Pierre-Michel Bataille whose telephone number is (703) 305-0134. The examiner can normally be reached on Tue-Fri (7:30A to 6:00P).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Matthew M. Kim can be reached on (703) 305-3821. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Pierre-Michel Bataille
Primary Examiner
Art Unit 2186

May 20, 2004